

Harris Corporation Supplemental Information Responses to Questions from October 15, 2010 Ex Parte Meeting November 12, 2010

Q1: In your view what is the right geographic size for a network with a PLMN ID? How many regions and how many PLMN IDs in the "notional architecture"?

A1: 50 states and one national PLMN ID.

- Q2: What does "permit and enable flexible interconnection of RANs to Cores" mean? In addition to 3G and earlier technologies, does this also imply legacy LMR and/or P25 narrowband PS network?
- A2: It is allowable by the standard and beneficial in certain situations to have a RAN connected to more than one core. This may be in support of acquisition of shared resources or redundancy. This was intended as input to the LTE network architecture and does not take legacy LMR and/or P25 RANs into account.
- Q3: There is a scheme for PLMN ID assignment that is supported by a number of parties. This scheme considers one ID per region and one global one representing the whole network of networks for the purpose of roaming. How do you view this scheme? Is your notional architecture supportive of this scheme?
- A3: The proposed notional architecture of assigning a PLMN ID to each state would support roaming through the establishment of roaming agreements between states. These agreements should be mandatory. The notional architecture does not preclude the use of a nation-wide PLMN ID used for roaming; however, there needs to be further discussion of how the core equipment would be deployed and how connectivity from the core to the RANs across the nation would be established in support of the use of the nation-wide PLMN ID.
- Q4: What are the national capabilities of notional architecture? How are the regions interconnected?
- A4: Interconnection of adjacent regions as they are deployed would ensure the interconnection of all regions once the network is fully deployed throughout the nation.
- Q5: What are the national services/applications and how are they implemented, regionally or nationally?
- A5: The proposed notional architecture allows regions to implement nationally compliant applications sets which may be accessed through the "local breakout" roaming architecture as well as allowing regions to continue to use existing custom applications through the "home routed" roaming architecture.



Q6: How is roaming implemented and managed?

A6: Through the establishment of roaming agreements and the deployment of a homogenous telecommunications technology, users located anywhere in the nation should be able to roam onto the network providing coverage in that location.

Q7: How is security/authentication implemented and managed?

A7: LTE provides two options for security. The selection of the AES algorithm for ciphering and integrity protection and the use of the MME and HSS as defined by 3GPP provides a roaming security solution. Security credentials established by a regional administrator may be used locally and in any roaming scenario.